



(19)

(11) Publication number:

1

Generated Document.

## PATENT ABSTRACTS OF JAPAN

(21) Application number: **08336313**(51) Int'l. Cl.: **B01D 63/02**(22) Application date: **02.12.96**

(30) Priority:

(43) Date of application  
publication: **16.06.98**(84) Designated contracting  
states:(71) Applicant: **NOK CORP**(72) Inventor: **FUJII YOSHIHISA**

(74) Representative:

### **(54) HOLLOW-FIBER MEMBRANE MODULE**

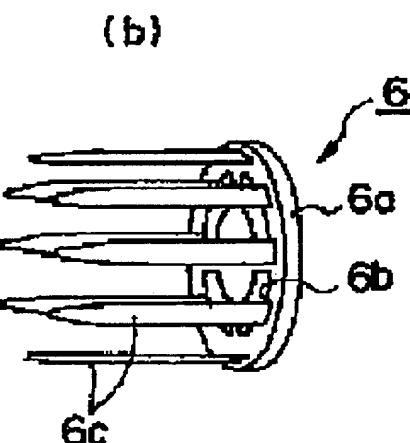
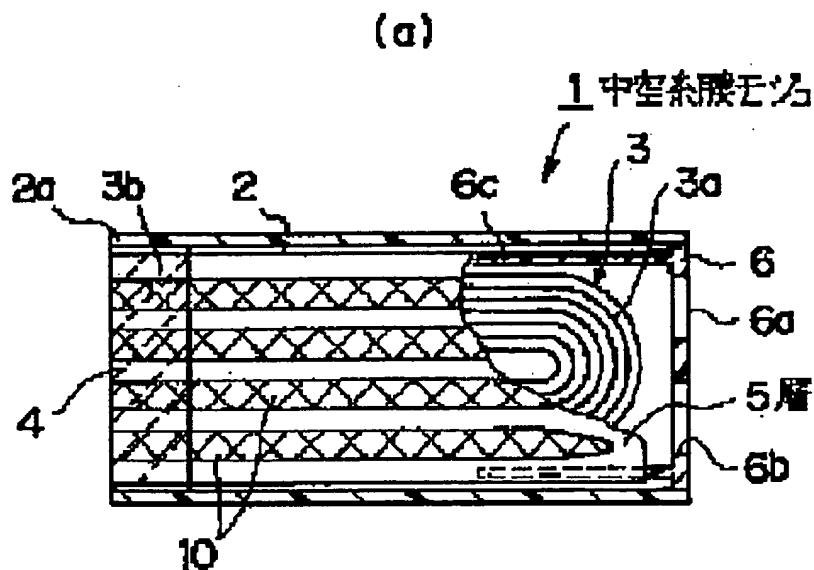
#### **(57) Abstract:**

**PROBLEM TO BE SOLVED:** To suppress the deformation of a layered air vent during filtration in a hollow-fiber membrane module formed by packing many hollow-fiber membranes with a sheet-shaped air vent means wound on them in a cylindrical case by providing a holding means to position the air vent means close to the inner periphery of the case.

**SOLUTION:** A hollow-fiber membrane module 1 is formed by packing the fiber bundle 3 of a hollow-fiber membrane 3a in a cylindrical case 2, and a potting part 4 is provided to seal a gap between the end 3b of the bundle 3 and the inner periphery of one end 2a of the case 2. Meanwhile, a layered air vent 5 is previously wound on the periphery of the bundle 3, then many communicating holes 10 are formed by the potting, hence the air staying

inside is discharged along with the membrane-permeated fluid, and a decrease in the membrane permeability is prevented. Further, a cap member 6 obtained by providing plural projecting members 6c to the periphery of a bottom plate 6a is inserted into an opening on the opposite side of the potting part 4 as a holding part to be positioned between the bundle 3 and the inner periphery of the case 2.

COPYRIGHT: (C)1998,JPO



BEST AVAILABLE COPY